
* INDIANA SINCLAIR-TIMEX NEWSLETTER *

JAN--FEB 1992

Editor - Frank Davis
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MEETINGS OF ISTUG

The February meeting will be on February 29th , 1:30 PM at the Eagledale Public Library. For those who need directions call Paul Holmgren at 317-291-6002 or Frank Davis at 317-473-8031. All meetings, unless notified otherwise are held the last Saturday of each month, at 1:30 P.M. at the Eagledale Public library. The meeting for March will be held at the same time and place on 28th of March. The meeting for April will be held on April 25th, same time and place. For those who are new or have not been to a meeting for a while, please take some time out to join us this day. You are always welcome to bring a guest, either family or friends. ISTUG meetings are not tightly ran as a club with Roberts Rules of Order. They are for getting help with a computing problem, showing off that new hardware or software, and for finding out what is happening in computing. We do not bite, nor do we try to be gurus. Friends helping friends. See you there! As Jack Dohany once told an unruly crowd "this is supposed to be fun, not so serious!" I do agree.

Ham and Computer Show at Indy

On March the 8th, at the Indiana State Fairgrounds, off 38th Street in Indianapolis, there will be one of Indiana's largest Ham and Computer shows of the year. And if that is still not enough reason to attend, well, this ought to be the real clincher.... Mechanical Affinity and UPDATE Magazine will have a booth or two there also, selling their wares (hard and soft), so as the circus barker says, "hurry, hurry for the big show!" The show will last all day and begins at about 9 A.M. and can get very crowded. They will have the usual refreshment stands and if that is not enough there will also be hundreds of people selling items for computers, and computers to go along with all of this. The prices will be at rock bottom and dickering over a price is allowed (in fact you could miss half the fun if you do not haggle over the price on most items.) Come to have a look at the rest of the computing world.

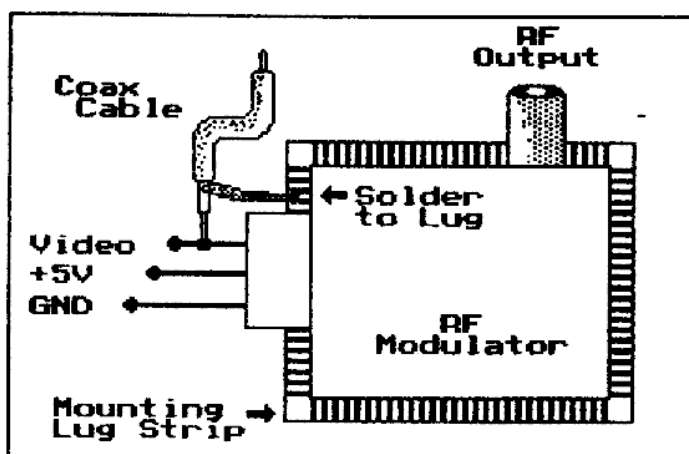
FWD

QUICK AND EASY VIDEO OUTPUT FOR THE ZX81 AND TS1000

From the March 1983 issue of Computers and Electronics Magazine

This past weekend I set aside the time to go through my collection of old computer and electronic magazines. Most of them were from the early 1980s, and were bought because of their Timex-Sinclair articles and other electronic projects.

The following information can be found in the March 1983 issue of Computers and Electronics Magazine in an article by Les Solomon entitled "Adding a Video Monitor to your Sinclair ZX81". As Mr. Solomon points out, the modification below can be made by



Video Monitor Output for the ZX81

adding a small piece of thin coax cable to the video out wire on the RF Modulator module (see figure above).

The center lead of the coax cable is soldered to the Video wire, and the braided shielding wire is pulled away and soldered to the mounting lug strip for grounding (see figure).

The other end of the coax cable should contain an RCA connector which is used to plug into the back of a composite monitor.

Mr. Solomon recommends when attaching the braid to the metal enclosure, "...the bottom grips can be used as the enclosure is solder-proof aluminum."

A better way to add a composite video output is to use a short piece of coax cable attached to a female RCA connector. This connector can be added to the back of the ZX81 or TS1000 by cutting a small hole in the back

of the computer and mounting the connector through it. After that, all that is needed is a cable like the one used to go between the TV output and the Game/TV switch box.

Additional Timex-Sinclair Video Project Information

Another project regarding TS1000 and ZX81 appeared in Computer and Electronics May 1983 issue. The article was written by Steve Pence and it covered modifications to provide direct video output and white-on-black display.

The project involves building a circuit which includes a buffer amplifier, a comparator (to separate the sync pulses), and additional circuitry for providing a composite and inverse video output. There is also a switch which allows the user to flop between inverse and standard video output.

The article is well written and contains a parts list, a schematic, a wave-form figure, a foil pattern for making the printed circuit board, and the component layout.

Mr. Pence wraps up his article with a diagram of the TS1000/ZX81 for installation as well as information on adjusting both the circuit and the users monitor for the best picture.

Both articles are well written and concise. They contain all the information required to make the modification within one issue of the magazine.

I highly recommend anyone with a TS1000/ZX81 to go to their public library and obtain a copy of both articles for their Timex-Sinclair project files.

And Last But Not Least...

If there is anyone out there who still owns a ZX80, there is a nifty little circuit in The Best Of Sync magazine which shows a schematic diagram for directly inverting the video signal of the ZX80, and adding a composite video output signal.

NOTE: ISTUG AND THIS NEWSLETTER ASSUME NO RESPONSIBILITY FOR THE MODIFICATIONS MENTIONED ABOVE.

Three More Quick Database Ideas for use with Timex/Sinclair VU-File!

CREATED AND WRITTEN BY MIKE FELERSKI

Over the last few issues of the Indiana Sinclair Timex Users Group Newsletter I have discussed several ideas for mini databases using the VU-File program for the TS1000, TS2068, and Sinclair Spectrum computers. Although I have chosen VU-File for the TS2068, all of my examples can be converted or used on other computer systems running different database programs.

The main reasons for which I have chosen VU-File for my examples are its availability, (almost everyone has a copy of it) and its extreme ease of use and speed. There are drawbacks to VU-File though. Some problems include limited print formatting

COMMANDS ARE: Enter Alter Inform
Forward Back Reset Order Select
Quit List Print Copy Delete

```

TRAVEL  DATABASE
FOR INTERSTATE 90
IN THE STATE OF PA
EXIT #      7
EXIT NAME   WATERFORD STATE ST
SERVICE TYPE FOOD
BRAND NAME  McDONALDS
OTHER INFOR WORLD'S CLEANEST

SERVICE TYPES INCLUDE:
SAB/FOOD/LOGGING/GIFTS
  
```

FIGURE 1, "INTERSTATE" DATABASE

(on full size printers) and limited fields within a data record. Some of these problems (i.e. printing) can be overcome via trickery, others we are stuck with. But for now let's look at some more VU-File database ideas.

The first database is a file of exits along a section of interstate highway. The database is part of a group of databases which trace an interstate through various states. Each of the files is broken up by Interstate Number and State. Therefore, I90 would have VU-File data files for Ohio, Pennsylvania and New York, etc. I have chosen to use Larken filenames I90OH, I90PA and I90NY.

Each database is arranged by Exit Number, Exit Name, Service Type, Service or brand Name and Other Information (see Figure 1).

COMMANDS ARE: Enter Alter Inform
Forward Back Reset Order Select
Quit List Print Copy Delete

```

Sinclair Users, and Contacts

Lastname: Chambers
First:    George
Address:  14 Richome Court
City:     Scarborough
State:    Ont Zip: M1K 2Y1
Phone #1:
#2:
  
```

FIGURE 2, A "SIMPLE USERS" DATABASE

This configuration allows a file to be printed based on all or selected services in Exit order. The Other Information field is for personal notes. Note also the bottom line of the screen contains the Service Types allowed which is used as an aid when entering data.

Finally, two very important pieces are the "For Interstate" and "In The State of" fields at the top of the screen. These are NOT real data fields. They are entered when a new database is created by using the Edit Layout feature thus making them look like actual data fields on the screen.

COMMANDS ARE: Enter Alter Inform
Forward Back Reset Order Select
Quit List Print Copy Delete

```

Misc. Information Card File

Joysticks

TS2068, Kempston Return Values
. TS2068      Kempston
5  1  9      10  6  9
4  0  6      2  0  1
6  2  10     6  4  5
  
```

FIGURE 3, "INDEX CARD" DATABASE

(Continued on the next page...)

Msg#: 3724 *CPMTECH*
04-26-91 22:04:00
From: JACK WINSLADE

Subj: PSEUDO-LEGAL OPINIONS

As, the following message was furnished by a local sysop who is currently finishing up his senior year law at UNL. With some administrivia and the dreaded Bar Exam, he will be able to CHARGE us for opinions like this ;-) but we caught him in time.

Please remember, that this is not the opinion of a licensed attorney, but that of a student who has done some investigation into this area.

As I figured, some of the comments are not what we want to hear, but these should put to rest some of the questions going around.

Please feel free to comment if you like.

Mr. Moderator:

I'm pleased to let you explore the limits of my knowledge about copyrights, which is very little even though they were covered in a course I took on legal regulation of the competitive process and unfair competition. While my instructor is an author of one of the standard texts in the field, and my dean is author of another, and while they jointly are Reporters for the Third Restatement of Unfair Competition (the actual title is something else, but I don't remember what at the moment. It includes copyright, however), please remember that I am not a lawyer and this is NOT legal advice. It's one sysop's understanding of what the law might be, and what someone should do to avoid trouble with the law or the copyright owner. Anyone needing legal advice should see an attorney licensed in their state.

> What does it mean to have a "copyright"?

Literally, the RIGHT to control COPYING and distribution of a work. Here is what the code says about it. (When in doubt, read the directions.)

17 USC 106. Exclusive rights in copyrighted works

Subject to sections 107 through 118, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

- (1) to reproduce the copyrighted work in copies or phonorecords;
- (2) to prepare derivative works based upon the copyrighted work;
- (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
- (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and
- (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

But remember there are some limitations on those rights:

17 USC 107. Limitations on exclusive rights: Fair use

Notwithstanding the provisions of section 106, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a

a civil action. Again, even if the answer were NO, the risk of legal action is real and most sysops want to avoid that kind of complication. This assumes, of course, that the owner of the copyright has not agreed to the duplication and dissemination.

> If a firm (such as Digital Research) verbally tells one user to find somebody with a program and copy it (since they no longer sell it), does it mean that it can then be freely copied and distributed??

I'd think it only means what it says. The ONE user has permission from the owner to make a duplicate and use it. The owner has not explicitly given blanket permission for anyone to do so, at least not by this statement.

> Exactly how does a program change from copyrighted status to being in the public domain.

It gets old or the copyright owner explicitly donates the program to the public domain.

> What exactly ****IS**** 'public domain'.

It means that the public owns the work, not the creator. Implicit in the statute is the concept that at some point in time the public /will/ own the work. For works of art, literature, etc., the time limits in the law are reasonable. For example, Willa Cather, a Nebraska author at the turn of the century, had a bad experience with Hollywood and forbade any filming of her works. Well, time passed. This year we see two separate productions of her novel Oh, Pioneers!. From an article I read in the TV section of the paper here in Omaha, it is because the statutory period has run and the studios may now use the work without her, or her estate's, permission. (Note also that her novels were copyrighted under an older act, and the time limits listed above don't apply.)

For computer programs, 75 years is an awfully long time, but the law has not changed (to my knowledge). The only exception the Act contains for computer programs allows personal use copies and archives:

17 USC 117. Limitations on exclusive rights: Computer programs

Notwithstanding the provisions of section 106, it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:

- (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
- (2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful.

Any exact copies prepared in accordance with the provisions of this section may be leased, sold, or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale, or other transfer of all rights in the program. Adaptations so prepared may be transferred only with the authorization of the copyright owner.

> Also anything else you might want to say.

As often happens with counselling, particularly in the law, you might not like what you've

or optional, while "shall" is mandatory. Thus, the law does NOT require a notice to be affixed. Such notice, however, gives additional power to the copyright holder. See below.]

* * *

- (d) Evidentiary Weight of Notice.--If a notice of copyright in the form and position specified by this section appears on the published copy or copies to which a defendant in a copyright infringement suit had access, then no weight shall be given to such a defendant's interposition of a defense based on innocent infringement in mitigation of actual or statutory damages, except as provided in the last sentence of section 504(c)(2).

17 USC 504(c)(2): In a case where the copyright owner sustains the burden of proving, and the court finds, that infringement was committed willfully, the court in its discretion may increase the award of statutory damages to a sum of not more than \$100,000. In a case where the infringer sustains the burden of proving, and the court finds, that such infringer was not aware and had no reason to believe that his or her acts constituted an infringement of copyright, the court [in] its discretion may reduce the award of statutory damages to a sum of not less than \$200. * * *

* * *

17 USC 411. Registration and infringement actions

- (a) Except for actions for infringement of copyright in Berne Convention works whose country of origin is not the United States, and subject to the provisions of subsection (b) [a work consisting of sounds, images, or both], no action for infringement of the copyright in any work shall be instituted until registration of the copyright claim has been made in accordance with this title.

The most recent Supreme Court case that discussed public domain at any length specifically mentioned that lapse or abandonment into the public domain could occur under /prior/ law, but went on to explain that the 1976 Copyright Act changed that premise and discussed the language of some of the changes. One of our hypothetical questions involved a manuscript without any notice affixed inadvertently left on an airplane. As I remember it, the next passenger who picked it up and published it was liable for infringement.

Since the US joined the Berne Convention, which is an international agreement that is even stronger in terms of creator's rights, I'd have to suggest that lack of enforcement by the owner is not going to be a very good defense for infringement.

I can think of some legitimate arguments that could be made by the alleged infringer if other people's unauthorized copying had been open and notorious for a long period, without the owner acting, but the bottom line is that it would, or could, involve lawyers and courts--and the purpose of the inquiry is to avoid such complications, no?

> When a firm no longer shows financial interest in a copyrighted program, does that in any way invalidate the copyright ??

Short answer: NO. It may mean that they will not prosecute infringement, but if I were in a position to give advice I would suggest that you not take the chance.

> Does a sysop who allows a BBS (moderator who allows an echo conference) to be used as a medium by which (out of production) copyrighted programs are exchanged risk legal liability ??

I'd have to say YES. Certainly a case could be made for aider and abettor, or co-infringer in

heard. My purpose, however, was not to tell you what you wanted to hear, but what I thought you needed to know. Of course, like I said at the beginning, I'm not a lawyer (yet). This isn't legal advice if for no other reason it isn't given to any particular person in response to any particular need. This is what one overeducated sysop thinks the law probably is, and once again, anyone with a real question or problem should contact a copyright lawyer licensed to practice in their state.

Sincerely,
Your resident Sysop.Wannabe.Attorney

* WANTED OR FOR SALE *

1) 288 STUFF! from Nigel Searle, 16 Church St., Keene, NH 03431, Tele: (800) 388-9836. 2 to 4 of each of the following for sale: 288 for \$199, Memory 128K for \$40, Memory 512K for \$160, Battery powered modem for \$120, File transfer for MAC or Iwaf for \$50, AC adaptor for \$6, Serial printer cable for \$10.

2) TS2068 STUFF!! This is a sell off of extra or donated items for the TS2068 by Frank Davis, 513 East Main St., Peru, IN 46970. These prices include postage and handling in the U.S.A. and are final prices, what is not sold will be donated to a local school. I am not giving up on the TS2068, it is just that on some items I have 4 to 6 of and they take up too much space. TELE: 317-473-8031, evenings and weekends only. and I will not return long distance calls, so leave a message with complete address and phone number if you do not get a person. TS2068s for \$50 and includes all cables and manual, TS2050 modems in case for \$35 with manual and software, Oliger Disk Drive Interface Boards with docs and motherboard for \$95, Larken Dock Port Board for use with Oliger system to give you access to the Larken Disk Drive System for \$50, Zebra OS64 boards for \$8, A&J Stringy Floppy drive with software and blank microwafers for \$45, Rotronics Wafadrive with software and manual for \$85 (this has dual 128K stringy floppy drives along with a serial port and parallel port and a built in Operating System! requires Spectrum mode and twister board), Twister Board for converting the back extension of a TS2068 to Spectrum set up for \$20, and for the TS1000 I have for sale an Aerco dual floppy drive setup with two 40 track DSDD drives in case with power supply and software and interface for \$200.

3) FOR SALE: 10 year accumulation of ZX-81, TS1000, TS 1500 and TS2068 computers, hardware, software, books & magazines. For 3 page list please send SASE to John McMichael, 1710 Palmer Dr., Laramie, WY 82070.

4) HELP, I have the disk version of QFLASH and it is corrupted (tried Super Media Manager with no luck) and need to get it repaired or a working copy. Can provide proof of legal ownership if required and will pay for P & H and media for helping. Contact me VIA: UPDATE MAGAZINE, P. O. Box 1095, Peru IN 46970 for Eliad Wannum.

I. S. T. U. G.
513 EAST MAIN STREET
PERU, IN 46970

FIRST CLASS MAIL



Address correction requested:

ISTUG is a not for profit, educational organization dedicated to helping users of Timex, Sinclair and Cambridge computers. We offer a hardcopy and software library for our membership along with technical assistance and monthly meetings (usually the last Saturday of the month at 1:30 P.M.). Full membership is available at \$12 per year and newsletter only subscriptions at \$9 per year. Send all inquiries, along with SASE, to ISTUG, 513 E. Main St., Peru, IN, 46970.

Database Ideas

(...FROM THE PREVIOUS PAGE)

My next sample database is a Simple Users database. Although almost everyone has created some kind of name and address list, I thought I would cover mine here.

For sorting purposes it has individual data fields for last name (first) and first name. By doing this I can also put company names in the Lastname field and the owner's name in the Firstname field.

The address field is actually two fields. This is done to cover things such as Suite number, etc. Next is the usual City, State (Province) and Zip code fields, where the State field is three characters wide so that it may include some longer abbreviations (I do know that Ontario could be ON).

The Zip/Postal code field can hold up to the US Zip+4. Finally, the two phone fields allow area code, phone number as well as extension. I use the second number field for business numbers (please see Figure 2 on the previous page).

My final database is a much more open format. It is designed to look and act like an index card and file box. The idea came from a pile of tiny slips of paper on which I had scribbled various Timex-Sinclair notes. They began to get out of hand so I decided to do something with them so that I could find them easily. Thus the "Index Card" database was created!

The first and top most data field is the card's index for sorting purposes. The remaining nine field (lines) of information are used in "Free Form" to display information (see Figures 3 and 4).

My example in Figure 3 shows the difference in return values between the TS2068 and Kempston Joystick ports. For most of the cards, I use the first full data line to further define the cards contents which can be viewed as a "Sub-Index".

In Figure 4 on this page is another example of the kind of

data which I like to store in an Index Card data file.

I have also broken the data into two different files for now: DTP, Desktop Publishing and PGM, Programming. Magazine articles could also be stored per card, but I have found there is not nearly enough space per record to store recipes. For recipes and similar types of data, I recommend another database program such as Profile or Master File.

Some VU-File Quick Tricks

One nice little remembered trick with VU-File printing is the ability to limit the number of data fields printed. When you enter the Print Format option from the Main

COMMANDS ARE: Enter Alter Inform
Forward Back Reset Order Select
Quit List Print Copy Delete

DTP Information Card File

Fonts

The Companion

Letter Perfect Font Lengths

Start at 50000, lengths:

BOLD is 1839, BOLD2 is 1899

TALL is 2257, AYANT is 1365

FIGURE 4. ANOTHER SAMPLE OF THE "INDEX CARD" TYPE DATABASE

Menu you are asked to define the locations of the data fields on the screen. The trick is that VU-File allows you to enter STOP at any time as you are defining locations. This means that you can have a data record with six fields and then define only the first three in the print format setup then press STOP. This causes the VU-File print routine to print only those first three data fields per data record.

For this reason, I chose to place the phone numbers as the last two data fields in each data record (see Figure 2). With this type of data record layout I am able to print either the entire record or print only the names and addresses for mailing labels!

Although VU-File has its short comings, I have found it to be a very powerful tool for storing straight forward an uncomplicated data.

In upcoming articles I hope to discuss some additional VU-File database ideas as well as an overview of spreadsheet programs available for both the TS2068, Sinclair Spectrum and the ZX-81 family of computers.

- Mike Felerski

PS If you have any interesting database ideas, please send them to: Mike Felerski
1284 Brushwood Ave.
Cincinnati, OH 45224

work in any particular case is a fair use the factors to be considered shall include--

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

[See below for a brief mention of the one exception for computer programs.]

> ... When does a copyright expire ??

The answer varies depending on who owns the copyright and the conditions under which they produced the work in question. The short answer for commercial computer programs is: a very long time, almost always at least 75 years.

17 USC 302. Duration of copyright: Works created on or after January 1, 1978

- (a) In General.--Copyright in a work created on or after January 1, 1978, subsists from its creation and, except as provided by the following subsections, endures for a term consisting of the life of the author and fifty years after the author's death.
- (b) Joint Works.--In the case of a joint work prepared by two or more authors who did not work for hire, the copyright endures for a term consisting of the life of the last surviving author and fifty years after such last surviving author's death.
- (c) Anonymous Works, Pseudonymous Works, and Works Made for Hire.--In the case of an anonymous work, a pseudonymous work, or a work made for hire, the copyright endures for a term of seventy-five years from the year of its first publication, or a term of one hundred years from the year of its creation, whichever expires first. If, before the end of such term, the identity of one or more of the authors of an anonymous or pseudonymous work is revealed in the records of a registration made for that work under subsections (a) or (d) of section 408, or in the records provided by this subsection, the copyright in the work endures for the term specified by subsection (a) or (b), based on the life of the author or authors whose identity has been revealed. Any person having an interest in the copyright in an anonymous or pseudonymous work may at any time record, in records to be maintained by the Copyright Office for that purpose, a statement identifying one or more authors of the work; the statement shall also identify the person filing it, the nature of that person's interest, the source of the information recorded, and the particular work affected, and shall comply in form and content with requirements that the Register of Copyrights shall prescribe by regulation.

> Does failure to actively enforce a copyright render it invalid??

Nothing in my course talked about abandonment or failure to enforce. Nothing in the code that I could find while researching these answers suggesting any statutory process of abandonment. Rights automatically accrue to a creator on creation. Publication, registration, or notice on the work are /not/ required. Notice may be required to get full damages, and registration is required to prosecute an infringement action.

17 USC 401. Notice of copyright: Visually perceptible copies

- (a) General Provisions. --Whenever a work protected under this title is published in the United States or elsewhere by authority of the copyright owner, a notice of copyright as provided by this section /may/ be placed on publicly distributed copies from which the work can be visually perceived, either directly or with the aid of a machine or device. (emphasis added)

[Ed. note: MAY, not SHALL. The distinction is critical in the law, "may" being permissive